

# SMOG CHECK Statewide

September 2017

### 1. Testing Volume

	All Tests	Failed	Percent (%) Failed
Initial Test	925,007	93,793	10.14%
Total	1,017,487	109,029	10.72%

### 2. Certification Volume

	Certificates Issued	Percent (%) Certificates Issued	No Certificates Issued	Percent (%) No Certificates Issued
Initial Test	823,987	89.08%	101,020	10.92%
Total	900,436	88.50%	117,051	11.50%

#### 3. Certification Volume by Station Type\*

Station Types	Certificates Issued on Initial Test	Percent (%) Certificates Issued	No Certificates Issued on Initial Test	Percent (%) No Certificates Issued
STAR Test Only	423,071	88.75%	53,649	11.25%
Non-STAR Test Only	21,868	92.01%	1,899	7.99%
STAR Test and Repair	243,343	88.47%	31,706	11.53%
Non-STAR Test and Repair	132,276	92.04%	11,447	7.96%
Total	820,558	89.26%	98,701	10.74%

<sup>\*</sup>Note: Excludes Basic area dealer, Fleets, and Referee stations

### 4. Initial Test Failures by Failure Type

	0	IS	BAR-97		
	Failed	Percent (%) Failed	Failed	Percent (%) Failed	
All Emissions	0	0.00%	24,277	13.54%	
All Visual	9,747	1.31%	7,785	4.34%	
All Functional	50,198	6.73%	20,599	11.46%	
OBDII	48,998	6.57%	11,831	6.60%	
Overall	56,785	7.62%	37,008	20.64%	

### 7. Initial Test Failures by Program Area

		OIS			BAR-97		
Program Areas	Initial Tests	Failed	Percent (%) Failed	Initial Tests	Failed	Percent (%) Failed	
Enhanced	648,767	49,811	7.68%	142,178	30,193	21.24%	
Partial	33,321	2,458	7.38%	10,214	2,292	22.44%	
Basic	57,819	4,078	7.05%	21,045	2,917	13.86%	
Change of Ownership	5,758	438	7.61%	1,676	413	24.64%	
No Program	0	0	0.00%	0	0	0.00%	
Unknown	0	0	0.00%	4,229	1,193	28.21%	
Total Program Area	745,665	56,785	7.62%	179,342	37,008	20.64%	

### 8. Initial Test Failures by Station Type

	OIS			BAR-97			
Station Types	Initial Tests	Failed	Percent (%) Failed	Initial Tests	Failed	Percent (%) Failed	
STAR Test Only	373,062	30,587	8.20%	103,658	21,627	20.86%	
STAR Test Only Suspended	15	0	0.00%	0	0	0.00%	
Non-STAR Test Only	20,872	1,267	6.07%	2,895	503	17.37%	
STAR Test and Repair	220,520	17,621	7.99%	54,529	12,171	22.32%	
STAR Test and Repair Suspended	0	0	0.00%	0	0	0.00%	
Non-STAR Test and Repair	126,334	6,984	5.53%	17,389	2,515	14.46%	
Test and Repair/Dealer	2,883	142	4.93%	152	8	5.26%	
Business Fleet	223	8	3.59%	0	0	0.00%	
Permanent Fleet Registered	144	5	3.47%	0	0	0.00%	
Referee	268	102	38.10%	181	90	49.72%	
Govt Fleet	1,344	69	5.13%	538	94	17.47%	
Total	745,665	56,785	7.62%	179,342	37,008	20.64%	

### 5. Initial Tests at All STAR Stations

Vehicles	Test and Repair Station Initial Tests	Test-Only Station Initial Tests	Test and Repair Station Certificates Issued	Test-Only Station Certificates Issued
Directed	38,791	85,983	30,864	69,467
Non-Directed	236,258	390,737	212,479	353,604
Total	275,049	476,720	243,343	423,071

## 6. Initial Tests at All Non-STAR Stations

Vehicles	Test and Repair Station Initial Tests	Test-Only Station Initial Tests	Test and Repair Station Certificates Issued	Test-Only Station Certificates Issued
Directed	329	103	220	59
Non-Directed	143,394	23,664	132,056	21,809
Total	143,723	23,767	132,276	21,868



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## 9. Number of Licensed Stations by Type/Privilege and Program Area

Station Type	Basic	Change of Ownership	Enhanced	Partial	Total
STAR Test and Repair	131	64	2,189	92	2,476
STAR Test Only	15	0	1,880	28	1,923
STAR Sub-total	146	64	4,069	120	4,399
Non-STAR Test and Repair	506	43	2,239	245	3,033
Non-STAR Test Only	17	4	365	26	412
Non-STAR Sub-total	523	47	2,604	271	3,445
Basic Area Dealer	67	0	0	0	67
Business Fleet	0	0	5	0	5
Permanent Fleet Registered	3	1	51	3	58
Referee	5	0	27	0	32
Government Fleet	41	3	282	12	338
Repair Only	2	1	46	0	49
Unknown Type	0	0	1	0	1
Other Station Sub-total	118	5	412	15	550
Total	787	116	7085	406	8394

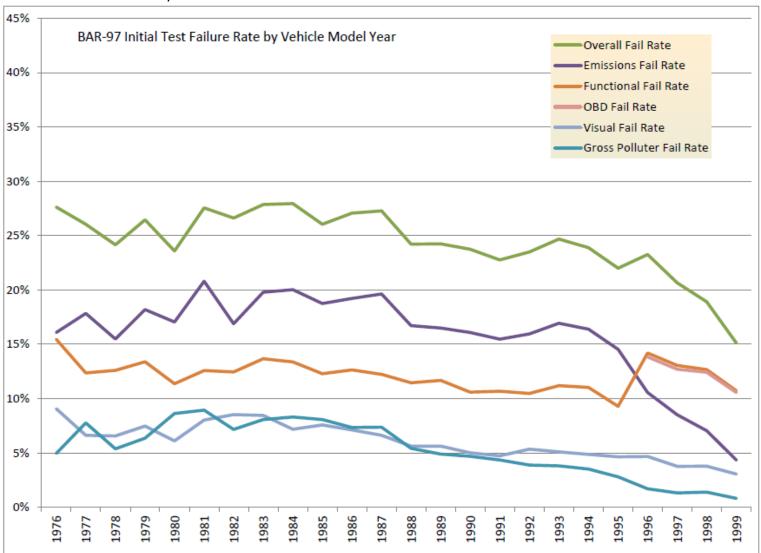
### 10. Number of Stations Conducting Test by Equipment Type

Station Type	Equipment Type			
Station Type	BAR-97 Only	OIS Only	BAR-97 & OIS	
STAR Test and Repair	1	285	2,124	
STAR Test Only	3	64	1,778	
STAR Sub-total	4	349	3,902	
Non-STAR Test and Repair	4	1,674	707	
Non-STAR Test Only	0	93	119	
Non-STAR Sub-total	4	1,767	826	
Basic Area Dealer	0	43	23	
Business Fleet	0	3	0	
Permanent Fleet Registered	0	11	0	
Referee	0	1	30	
Government Fleet	15	101	57	
Unknown	0	0	0	
Other Station Sub-total	15	159	110	
Total	23	2,275	4,838	



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### 11. BAR-97 Initial Test Failure Rate by Vehicle Model Year

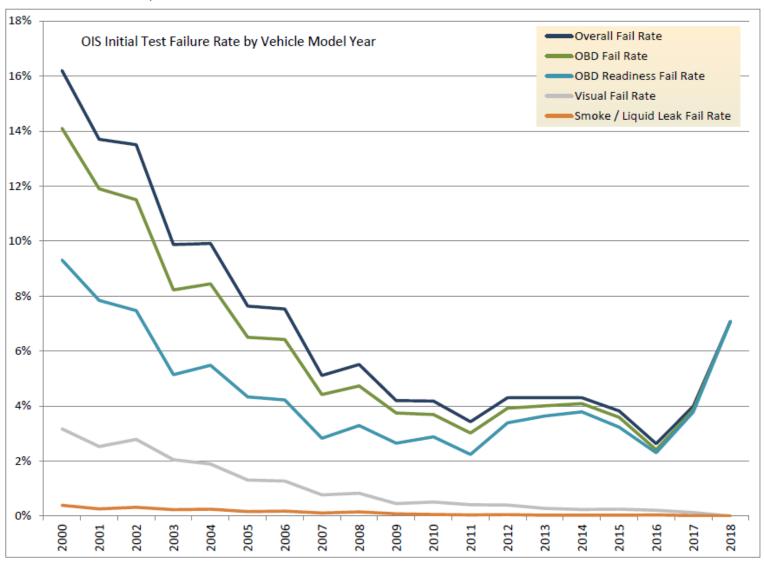


Note: Please see tabular data in Table 18 for BAR-97 tests conducted on other vehicle model years not shown in chart.



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### 12. OIS Initial Test Failure Rate by Vehicle Model Year



Note: Please see tabular data in Table 19 for OIS tests conducted on other vehicle model years not shown in chart.



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### 13. Referee Activity

	OIS Certificates Issued	BAR-97 Certificates Issued
Certificate of Compliance	379	221
Certificate of Non Compliance	0	0
Parts Cost	58	18
Hardship Extensions	0	0
Exempt Vehicle	1	24
Exempted by Directive	10	14
Parts Exemption	9	0
Unknown Outcome	0	0
Permanently Exempt Vehicle	0	0
Temporarily Exempt Vehicle	0	0
Total	457	277

#### 14. Active Technicians

License Type	Technician Count
EA (Inspect and Repair Basic)	1
EA (Inspect and Repair Enhanced)	1
EI (Repair Only)	1
EO (Inspect Only)	2,736
EO + EI (Inspect and Repair)	3,959
Total	6,698

### 15. Inspection Costs by Station and Test Type<sup>1</sup>

Station Type	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost		Average OIS Inspection Cost	Total Initial Test Count	Overall Average Inspection Cost
STAR Test and Repair	52,060	\$50.94	218,697	\$48.17	270,757	\$48.70
STAR Test Only	98,409	\$47.47	372,200	\$49.43	470,609	\$49.02
Non-STAR Test and Repair	16,467	\$47.82	123,627	\$53.61	140,094	\$52.93
Non-STAR Test Only	2,746	\$42.68	20,668	\$56.18	23,414	\$54.60
Test and Repair/Dealer	144	\$53.23	2,720	\$58.15	2,864	\$57.90
Total	169,826	\$48.49	737,912	\$49.98	907,738	\$49.70

## 16. Inspection Costs by Station and Equipment Type<sup>1</sup>

Station Type	BAR-97 Equ	ipment Only	OIS Equipment Only		Both Equipment (BAR-97 + OIS)				
	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost		Average OIS Inspection Cost	BAR-97 Initial Test Count	Average BAR-97 Inspection Cost	OIS Initial Test Count	Average OIS Inspection Cost	
STAR Test and Repair	2	\$29.99	11,721	\$53.77	52,058	\$50.94	206,976	\$47.85	
STAR Test Only	1,681	\$17.80	5,422	\$41.95	96,728	\$47.98	366,778	\$49.54	
Non-STAR Test and Repair	7	\$57.64	66,128	\$60.23	16,460	\$47.82	57,499	\$46.00	
Non-STAR Test Only	0	\$0.00	7,724	\$76.44	2,746	\$42.68	12,944	\$44.09	
Test and Repair/Dealer	0	\$0.00	1,731	\$58.89	144	\$53.23	989	\$56.85	
Total	1,690	\$17.98	92,726	\$59.67	168,136	\$48.80	645,186	\$48.58	

<sup>1</sup>Note: Smog Check Inspectors are asked to enter their inspections costs once per month. These costs may or may not include any discounts and may not reflect the actual inspection cost. Additionally, inspection costs entries in excess of \$99 cannot be entered into the BAR-97 software.



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### 17. Repair Costs

Repair Station Type	All Cost Ranges	Vehicles Repaired	Average Cost	(All Cost Ranges) Vehicles Repaired	(All Cost Ranges) Average Cost
	\$1-100	1,655	\$46	5,980	\$378
	\$101-250	1,408	\$174		
STAR Repairs (Test and Repair, Non-CAP)	\$251-500	1,435	\$362		
	\$501-650	511	\$570		
	Over \$650	971	\$1,161		
	\$1-100	509	\$47	1,713	\$368
	\$101-250	459	\$168		
Non-STAR Repairs (Test and Repair)	\$251-500	392	\$362		
	\$501-650	112	\$572		
	Over \$650	241	\$1,345		
	\$1-100	0	\$0	0	\$0
	\$101-250	0	\$0		
Repair Only	\$251-500	0	\$0		
	\$501-650	0	\$0		
	Over \$650	0	\$0		
	\$1-100	1	\$0	255	\$619
	\$101-250	13	\$208		
CAP Repairs	\$251-500	84	\$390		
	\$501-650	65	\$585		
	Over \$650	92	\$918		
	\$1-100	2,165	\$46	7,948	\$384
	\$101-250	1,880	\$173		
Total Repairs	\$251-500	1,911	\$363		
	\$501-650	688	\$572		
	Over \$650	1,304	\$1,178		

Note: Non-CAP repair costs are based solely on Smog Check Inspector entries. The majority of non-CAP repairs are not entered into the repair database and therefore not included in this summary.



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### 18. Tabular Data for BAR-97 Initial Tests by Vehicle Model Year

Model Year	Initial Tests	Failed Overall	Percent (%) Failed Overall	Percent (%) Failed Emissions	Percent (%) Failed Gross Polluters	Percent (%) Failed Functional	Percent (%) Failed Visual	Percent (%) Failed OBDII
1976	485	134	27.63%	16.08%	4.95%	15.46%	9.07%	NA
1977	695	181	26.04%	17.84%	7.77%	12.37%	6.62%	NA
1978	762	184	24.15%	15.49%	5.38%	12.60%	6.56%	NA
1979	896	237	26.45%	18.19%	6.36%	13.39%	7.48%	NA
1980	475	112	23.58%	17.05%	8.63%	11.37%	6.11%	NA
1981	548	151	27.55%	20.80%	8.94%	12.59%	8.03%	NA
1982	586	156	26.62%	16.89%	7.17%	12.46%	8.53%	NA
1983	768	214	27.86%	19.79%	8.07%	13.67%	8.46%	NA
1984	1,324	370	27.95%	20.02%	8.31%	13.37%	7.18%	NA
1985	1,797	468	26.04%	18.75%	8.07%	12.30%	7.57%	NA
1986	2,752	745	27.07%	19.22%	7.34%	12.65%	7.12%	NA
1987	2,837	774	27.28%	19.63%	7.37%	12.23%	6.63%	NA
1988	3,394	822	24.22%	16.71%	5.42%	11.46%	5.63%	NA
1989	4,725	1,146	24.25%	16.49%	4.89%	11.68%	5.63%	NA
1990	5,328	1,265	23.74%	16.08%	4.69%	10.60%	5.01%	NA
1991	7,058	1,607	22.77%	15.47%	4.35%	10.68%	4.73%	NA
1992	6,765	1,590	23.50%	15.96%	3.89%	10.47%	5.35%	NA
1993	9,119	2,251	24.68%	16.94%	3.81%	11.20%	5.10%	NA
1994	10,845	2,592	23.90%	16.39%	3.52%	11.03%	4.87%	NA
1995	16,790	3,695	22.01%	14.53%	2.80%	9.29%	4.65%	NA
1996	13,432	3,126	23.27%	10.56%	1.70%	14.20%	4.68%	13.84%
1997	24,564	5,073	20.65%	8.52%	1.32%	13.06%	3.77%	12.71%
1998	23,465	4,439	18.92%	7.05%	1.39%	12.68%	3.78%	12.43%
1999	36,151	5,465	15.12%	4.35%	0.82%	10.72%	3.06%	10.56%
2000	344	48	13.95%	8.14%	2.62%	8.72%	1.45%	8.72%
2001	363	37	10.19%	5.23%	1.93%	5.51%	1.38%	5.23%
2002	272	25	9.19%	5.51%	0.37%	6.25%	1.10%	6.25%
2003	420	28	6.67%	2.86%	0.71%	3.81%	1.19%	3.81%
2004	293	13	4.44%	2.39%	0.68%	2.73%	1.02%	2.73%
2005	401 293	20 6	4.99%	2.74%	1.25%	1.75%	1.25%	1.75%
2006 2007	360	20	2.05% 5.56%	1.71% 2.50%	0.34% 0.83%	0.34% 3.33%	0.00% 1.11%	0.34% 3.33%
2007	242		1.65%		0.00%	1.24%	0.00%	1.24%
2008	121	1	0.83%	0.41% 0.00%	0.00%	0.83%	0.00%	0.83%
2010	58	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2011	252	2	0.79%	0.40%	0.40%	0.40%	0.40%	0.40%
2011	71	2	2.82%	2.82%	0.40%	1.41%	0.40%	1.41%
2012	31	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2013	34	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2015	31	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2016	41	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
2017	116	4	3.45%	0.86%	0.00%	0.86%	2.59%	0.86%
2018	35	1	2.86%	0.00%	0.00%	0.00%	2.86%	0.00%
Other	3	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	179,342	37,008	20.64%	10.93%	2.61%	11.49%	4.34%	6.60%

Some model year 1975 and older vehicles required a Referee inspection (for example, engine changes). Vehicle model years 2000 and newer were tested on the BAR-97 because they may not be compatible with the OIS test (for example, a non-OBD-II certified vehicle).

See Table 19 for Smog Check requirements.



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## 19. Tabular Data for OIS Initial Tests by Vehicle Model Year

Model Year	Initial Tests	Failed Overall	Percent (%) Failed Overall	Percent (%) Failed Functional	Percent (%) Failed Visual	Percent (%) Failed OBDII	Percent (%) Failed OBDII Readiness	Percent (%) Failed Smoke and/or Liquid Leak
1996	6	1	16.70%	16.70%	0.00%	16.70%	16.70%	0.00%
1997	9	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
1998	199	34	17.10%	16.60%	2.51%	14.60%	7.04%	2.01%
1999	835	120	14.40%	12.30%	2.28%	12.10%	7.19%	0.24%
2000	34,752	5,636	16.20%	14.50%	3.17%	14.10%	9.31%	0.39%
2001	61,830	8,444	13.70%	12.10%	2.53%	11.90%	7.84%	0.26%
2002	38,897	5,250	13.50%	11.80%	2.79%	11.50%	7.47%	0.32%
2003	78,486	7,746	9.87%	8.45%	2.05%	8.22%	5.14%	0.23%
2004	42,483	4,208	9.91%	8.69%	1.89%	8.44%	5.48%	0.25%
2005	83,567	6,375	7.63%	6.67%	1.31%	6.50%	4.33%	0.16%
2006	44,395	3,342	7.53%	6.60%	1.27%	6.42%	4.22%	0.18%
2007	96,527	4,933	5.11%	4.53%	0.77%	4.42%	2.83%	0.11%
2008	32,707	1,801	5.51%	4.88%	0.83%	4.73%	3.29%	0.15%
2009	56,329	2,366	4.20%	3.83%	0.45%	3.75%	2.65%	0.08%
2010	20,167	842	4.18%	3.75%	0.51%	3.69%	2.88%	0.06%
2011	80,082	2,744	3.43%	3.06%	0.41%	3.02%	2.24%	0.04%
2012	14,661	630	4.30%	3.97%	0.40%	3.92%	3.39%	0.05%
2013	17,288	745	4.31%	4.05%	0.28%	4.01%	3.64%	0.03%
2014	12,520	538	4.30%	4.12%	0.24%	4.09%	3.79%	0.03%
2015	12,619	482	3.82%	3.62%	0.25%	3.59%	3.23%	0.03%
2016	10,977	289	2.63%	2.44%	0.21%	2.41%	2.30%	0.04%
2017	6,113	244	3.99%	3.88%	0.13%	3.86%	3.78%	0.02%
2018	212	15	7.08%	7.08%	0.00%	7.08%	7.08%	0.00%
Other	4	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
All Model Years	745,665	56,785	7.62%	6.73%	1.31%	6.57%	4.44%	0.16%

Note: Some model year 1999 and older vehicles required a Referee inspection, were tested at Beta stations, or were 1998/1999 model year diesels.

See Table 20 for Smog Check requirements.



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#### 20. Smog Check Requirements by Vehicle Type

SMOG CHECK REQUIREMENTS										
BY VEHICLE TYPE										
		GVWR <sup>1</sup>	OBD II Equipped ?	Smog Check Required						
Fuel Type	Model-Year			None	OIS Test	BAR-97 Test				
AII <sup>2</sup>	Four model-years and newer <sup>3</sup>	All	All	х						
(except Diesel)	Fifth and sixth model-years <sup>4</sup>	All	All	X						
	1975 and earlier	All	All	X						
	1976-1999	All	All			Х				
Gasoline & Flex Fuel		14 000 and loss	Yes <sup>5</sup>		X					
(Methanol or Ethanol)	2000 and newer	14,000 and less	No			Х				
		Over 14,000	All			Х				
Hybrid	2000 and newer	14,000 and less	All		Х					
	1976-1999	14,000 and less	All			Х				
Dedicated Propane	1970-1999	Over 14,000	All	X						
and Natural Gas	2000 and newer	14,000 and less	Yes		Х					
(CNG, LNG, or LPG)			No			Х				
		Over 14,000	All	X						
	1976-1997	All	All	X						
Diesel	1998 and newer	14,000 and less	All		Х					
	1996 dilu Hewei	Over 14,000	All	<b>X</b> <sup>6</sup>						
Full Electric Powered	All	All	All	X						
Motorcycle	All	All	All	x						
Other Vehicles: Two Cylinder Engine, Two-stroke Engine,	All	All	All	х						
Off-highway Registered										

- <sup>1</sup> Gross vehicle weight rating
- Includes gasoline, flex fuel, hybrid, dedicated propane, and natural gas vehicles. A Smog Check is required for all out-of-state 1976 model-year and newer vehicles registering in California for the first time and other initial registration events determined by the Department of Motor Vehicles.
- <sup>3</sup> Vehicles four model-years and newer are not subject to biennial (every other year) or change-of-ownership Smog Checks. Add four to the model-year of a vehicle to determine the first year a vehicle will be subject to a change-of-ownership Smog Check. For example, a 2010 model-year vehicle will be first subject a change-of-ownership Smog Check in 2014 (2010+4=2014).
- <sup>4</sup> Fifth and sixth model-year vehicles are not subject to biennial Smog Checks. However, a change-of-ownership Smog Check is required. Add six to the model-year of a vehicle to determine the first year a vehicle will be subject to a biennial Smog Check. For example, a 2010 model-year vehicle will be first subject to a biennial Smog Check in 2016 (2010+6=2016).
- <sup>5</sup> In the future, BAR may identify some vehicles that have GVWR of 14,000 and less or that have problematic OBD II systems that may require the BAR-97 test.
- <sup>6</sup> Fleet vehicles are subject to the ARB Periodic Smoke Inspection Program (PSIP).